NARRATIVE REPORT

UPPER MISSISSIPPI RIVER NATIONAL WILDLIFE REFUGE

Savanna District

FISCAL YEAR 1975

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7/1/74 to 9/27/74

United States Department of the Interior

Fish and Wildlife Service

Bureau of Sport Fisheries and Wildlife

Savanna, Illinois

I. GENERAL

Factors affecting habitat conditions on the river frequently reached extremes in one form or another and rarely settled into that theoretical state known as "normal". Precipitation was below normal keeping river levels below normal during the first three quarters of the year. In fact the level of Pool #13 reached an all time low during July. Growth of submergents occurred in Spring Lake and Pool #13, the dominant plant being sago pondweed which provided food for migratory waterfowl during the fall. Emergents such as lotus and sagittaria were abundant and provided adequate waterfowl brood habitat. Beds of lotus expanded noticeably probably due to both low river levels and siltation. Moist soil plants were late in beginning growth on mud flats and due to an early frost few plants matured. Refuge crops were seeded late due to flooding and resulting yield was below normal. In fact some crops made no yield due to an early frost. Low river levels during the fall migration provided many attractive loafing areas for waterfowl.

During the winter river levels remained below normal. Backwaters began freezing over about mid-November and the main channel was ice covered the second week of December. A combination of factors including low river levels, siltation of sloughs and backwaters and cold weather during late winter contributed to some winter kill of fish. The main channel remained ice covered until the first week of March and by the end of the month most water areas were ice free.

The river began its annual spring rise the second week of April and crested 5.8 feet above flood stage at Dubuque on May 6. Three days later the river crested at 590.85 m.s.l. at Savanna which was the third highest crest on record for this area. The high water remained until the end of July which meant that for a period of over three months river levels well above normal were maintained. Habitat for ground nesting birds and mammals was non-existant during much of this period. Also development of aquatic and upland vegetation was delayed beyond normal.

The upper end of Spring Lake was pumped down in July in an effort to allow production of natural waterfowl foods. Inspite of the lateness of this effort good stands of chufa developed on exposed mud flats and were slowly flooded during the fall. The area proved attractive during the fall migration as evidenced by the fact that the peak duck population exceeded 82,000 birds. Over the past seven years fall waterfowl use of the area has steadily increased. It is difficult to pinpoint reasons for this but water-level management and the fact the area is closed during the hunting season are considered key factors.

During the spring the area was flooded by high water. The lower cross dike was inundated and some wave action damage occurred on the west dike. These high water conditions provided favorable fish reproduction habitat and a massive fish run and resulting fish hatch were observed. As the water level receded the fish left the area and by the end of May the water level was being held at the approved management level.

At Pleasant Creek the Bonnie Lake level was held high as possible to provide waterfowl brood habitat. This lake proved attractive to wood ducks during the summer and early fall. Both Golden and Flat Lake dikes have washouts and thus water levels fluctuate with the river. Low river levels exposed mud flats on both lakes where excellent stands of chufa and smartweed developed. However, the river remained low during the fall and thus the moist soil plants remained unflooded and unavailable to migratory waterfowl. During the spring and early summer the Pleasant Creek impoundments remained flooded. At the end of the period little or no aquatic or upland vegetation had developed due to high water.

Siltation continues as a major factor affecting refuge habitat conditions. Many backwater sloughs and especially lakes are silting in and as a result the shallow water can no longer support fish during the winter months. In some cases no fishery habitat remains as some sloughs and lakes have been converted to mud flats and upland. In other cases it appears that deep open water is being converted to a marshland type, however, as the process continues the marshland type is lost. Also it appears that siltation is aiding the expansion of lotus beds. In some areas the beds have become so extensive and monotypic that their value to wildlife is questionable. As siltation continues habitat conditions will change and most of these changes would now appear to be detrimental to wildlife. At present, there is no way that we are able to remedy the detrimental effects of siltation once it has occurred.

II. WILDLIFE

A. Migratory Birds.

Ducks: Waterfowl production on the district was considered average with approximately 2,940 ducks raised to flight. Species produced included wood duck, mallard, blue-winged teal and hooded merganser. Brood habitat was adequate throughout most of the district.

During August and early September migrating waterfowl arrived on the district. The early migrants consisted primarily of teal and wood ducks. By the second week of September most species of puddle ducks were observed in the area. Diving ducks did not arrive in any number until mid-October. Waterfowl numbers increased rapidly and reached the fall peak population November 11. Waterfowl numbers then dwindled just as rapidly and by the end of November only a few birds remained.

Fall waterfowl use of the Spring Lake Closed Area has increased dramatically over the past seven years. During 1967-68 the upper end of Spring Lake was diked and a water control structure with a pump was constructed. This gave us the capability to drawdown approximately 700 acres and promote the growth of moist soil plants. This vegetation is slowly flooded during the fall to make the food source available to waterfowl. This area is utilized primarily by mallards during the fall and is the species that has responded most dramatically to this area in terms of fall populations.

The lower portion of the Spring Lake Closed Area has also had a dramatic increase in waterfowl use. Most of this increase is attributed to increased scaup numbers although other species of divers are also present. The divers utilize the lake primiarily as a resting area and feed at night approximately six miles to the south in Pool #13.

The increase in fall use of the area is significant. During the fall of 1968 the estimated peak population on the area was 23,000 ducks. Since then the fall peak population has steadily increased to a high of 82,000 ducks during 1974. It is difficult to speculate just what the future of this trend will be or at what level the trend may stabilize at if it does stabilize. At any rate, the area serves as an attractive resting area and due to the fact that the birds have developed night time feeding habits they receive little gunning pressure during the hunting season.

The spring migration got off to a slow start the first half of March but then large numbers of most species of ducks arrived later in the month. The peak duck population occurred March 29

at an estimated 116,000 birds. During this period a minimum of 35,000 scaup utilized the lower portion of Pool #13, just upstream from the dam, as a resting and feeding area. Spring duck populations declined until mid-May when the birds remaining represented the district breeding population.

Spring weather was favorable for nesting waterfowl, however, river levels were not and the flooding waters wiped out the first nesting effort of ground nesting ducks. Some cavity nesting birds such as wood ducks and hooded mergansers lost first nests to high water especially in the upper portions of the pools. Most birds lost nests during the late stages of laying or early stage of incubation and it is believed that most birds renested after the water levels receded. Due to the extensive flooding of the first nesting attempt we anticipate average production at best.

Geese: The resident goose population was estimated at approximately 160 birds during the summer. Of this total approximately 50 birds represented production from the spring of 1974.

The first migrant geese arrived during mid-September. The fall population of Canada Geese remained low and peaked November 30 at an estimated 720 birds. The snow goose population remained even lower with the peak population of 520 birds being observed November 2. By mid-January all geese had migrated from the district.

The spring migration of geese reached the district during the first week of February. The peak Canada goose population was an estimated 1900 birds observed March 29. This is in contrast to previous years when the peak usually reached 10,000 birds. We have no suitable explaination for this reduction in spring peak population of Canada geese. As expected the spring snow goose population remained low with only 30 birds being sighted the last week of March.

The resident breeding goose flock, estimated at 20 breeding pairs, began nesting early due to favorable weather conditions. However, most nests were lost due to flooding. Most goose nests were flooded when the birds were in the late stages of incubation and only one pair was known to renest. The renest took place on an artificial goose nest structure in Spring Lake and represented the first goose nest on an artificial structure in Spring Lake. Production was apparently reduced by the flooding as only four confirmed brood sightings were made compared to eleven sighted the previous year. Breeding populations were similar during both years.

Swans: The district receives little use by swans. During the fall migration 34 swans were observed during November and only 44 swans were observed during the spring migration.

2. Other Water Birds.

This category includes coots, egrets (great white and cattle), herons (great blue, green, black-crowned and yellow-crowned), bitterns (American and least), common loons, grebes (pied-billed and horned), double-crested cormorants, gulls (ring-billed, herring, Franklin and Bonaparte's) and terns (common and Caspian). It would be sufficient to say that these birds have not changed in stature since last year. Little time is spent censusing these species (except for the double-crested cormorant) aside from observations made incidental to other refuge activities. The coot, great white egret, great blue heron, green heron, pied-billed grebe, American bittern, and couble-crested cormorant all nest within the district. The other birds are fairly common spring and fall migrators.

The double-crested cormorant colony which is located in two trees in Pool #13 was given a new look. In March, eight artificial platforms were installed in the trees to provide additional nesting sites. It is believed that this is the last remaining colony in Illinois and possibly the southern most nesting colony in the Mississippi flyway. The cormorants arrived at Pool #13 on April 5th and took readily to the new sites. Nesting attempts were made on five of the platforms but only three nests fledged young birds.

Natural and artificial nest sites being utilized by cormorants in Pool #13.

Historically the double-crested cormorant was a very common nester in the area with large colonies being present in the late 1940's. Up to that time nesting habitat was ideal for these birds. Since that time they have lost nearly 100% of their nesting habitat. We have now taken the initiative of trying to keep this bird a common nester. The installation of the platforms made a net increase of nests in the colony from 11 to 12. The colony produced a total of 26 young this year with some of the nests producing three birds. We hope to install similar structures in comming years.

The fate of the colony is questionable. The present nesting habitat consists of only two large dead trees located in Pool #13 in an area inaccessable to large equipment. We feel the most effective plan would be to place poles in the pool near the existing colony but this appears impossible. An alternative plan would be to place poles and platforms in an area that was a former colony site. This site would be accessable during the winter months for the necessary equipment. Inspite of funding limitations some effort should be made to retain and improve the colony.

3. Shorebirds.

Population figures are kept on these species but no special effort is made to census them because of the time involved. Observations are made while performing other refuge activities.

4. Mourning Dove.

The dove is present on the district all year long. Some nesting occurs but is limited primarily to our sand prairie areas. Fall migration build-ups usually occur during the last week in August and are sometimes quite spectacular. However, this year as in the past two years we have not had large numbers of doves.

B. Upland Game Birds.

The ring-necked pheasant, bob-white quail, and gray partridge are residents on the district. These populations are extremely small and although we do have some production for all species, most of the birds move in and out of the refuge from surrounding farm lands.

C. Big Game Animals.

The white-tailed deer is our only big game animal. The oak ridges which are very common on the river islands provide most of the habitat. Population figures vary throughout the year but

we estimate a peak herd size of 300 animals. Movement in and out of the refuge from surrounding private land is very common, especially during spring highwater which moves most of the deer off the refuge.

D. Fur Animals, Predators, Rodents and Other Mammals.

With river bottoms comprising most of the refuge, fur bearing animals which inhabit water areas are quite abundant. Fall muskrat house counts indicated a population of 42,500 muskrats which is a decline from last year. Fall beaver lodge counts indicated a population of 2400 beaver. This population has been steadily rising due to a closed beaver season in Illinois.

The abundance of beaver is actually having a positive effect on the river bottoms. The loss of waterfowl and fish habitat due to siltation and dredging is becoming quite staggering. The damming of sloughs and lakes by beaver creates higher and more stable water levels which is beneficial to habitat values.

The decline of muskrats during the last few years is related to a number of factors. High fur prices have put more trappers in the field and they are trapping for longer periods of time. Previously one trapper would work an area and move out and that area would not be retrapped until the following season. Now trappers will work an area and when they leave other trappers will move in and retrap the area. This high trapping pressure nearly eliminates muskrats from some areas.

Overtrapping is indeed a factor to be concerned with, however, the varied habitat on the refuge makes it almost impossible to overtrap the whole population. Natural factors, including flooding, low water, and siltation are the major culprits in the decline of this once superabundant animal. Record high spring floods were unusual until about ten years ago. Since 1965, high level floods have occurred almost every other year. This high water usually starts the last of March and continues until mid-May. During this period of time muskrats should have their first litter but it gets wiped out almost completely. Also the past three years, after spring high water, we had a low water period that dried up most shallow water areas and marshes which are important to the muskrat.

Lastly but most important, is the siltation problem. Marshes, sloughs and lakes which used to be ideal habitat for the muskrat no longer exist. They have filled in to the extent that they are now upland sites. This reduction in muskrat habitat is reducing the population.

Other fur animal populations, including raccoon, red fox, striped skunk and oppossum are on the increase. The raccoon population is almost at an epidemic stage. Although they are hunted and trapped

extensively, their populations continue to increase.

Mink, otter, grey fox, cottontail rabbit, squirrels and woodchuck seem to be holding at a stable level.

The coyote is increasing its numbers in the area. Five years ago, it was a rarity to hear of a coyote. Today, sightings and captures are quite common. It appears that the coyote population has increased during the past years while the fox population was at a low level due to mange. Mange has run its course in the fox population and the fox is making a good comeback.

E. Hawks, Eagles, Owls, Crows and Vultures.

As with many other species, we make no special effort to census these birds (except for the bald eagle) but information on these populations is gathered incidental to other refuge activities. It is always enjoyable to see an osprey, sharp-shinned hawk, Cooper's hawk, goshawk or American peregrine falcon. Although these birds are not common to this area, we usually spot all of the above birds during fall migration.

Broad-wing hawks usually migrate through the area about the 3rd week in September with their characteristic swirling "cloud" formations. Hundreds of these birds may be seen at one time.

Common nesters on the refuge include the turkey vulture, re-tailed hawk, barred owl, screech owl and great horned owl.

During Spring and Fall migrations we see goodly numbers of marsh hawks, bald eagles, sparrow hawks, rough legged hawks and short eared owls.

The common crow can be found on the refuge at all times of the year and it is a common nester. Fall migration brings the largest number of crows to the refuge.

The diversity of bird species can be appreciated by the fact that there are 255 different species included in our refuge bird list.

Bald Eagle

The Upper Mississippi Refuge is blessed with one of the largest wintering bald eagle populations in the contiguous United States. The Savanna District winters more birds than any other district primarily due to the fact that we have more open water. On the 11th of January we had an estimated 240 eagles on the district.

Eagle counts are taken on selected days in cooperation with the National Audubon Society and the National Wildlife Federation.

The eagles usually start arriving around mid-October with immature

birds being the first to arrive. The eagles then peak out around the 2nd week of January and are usually gone by the 2nd week of May.

While the eagles are in the area, they can be spotted anywhere along the main channel of the river. However, certain concentration areas are noticeable such as tail waters of the locks and dams, tributary streams entering the river, and power plants. All of these have one thing in common - open water where the eagles can obtain food.

A meeting was held in the Spring with Elton Fawks who is the coordinator of the Mississippi Valley Bald Eagle Survey, in relation to the buying of approximately 200 acres of bluff land by the National Wildlife Federation for the establishment of an eagle sactuary. The land was then to be turned over to the refuge for management and protection of the bald eagle.

All parties were quite anxious to get the project rolling. However, after submitting initial recommendations in favor of the project nothing has been heard. Just what has happened, no one really seems to know.

This bald eagle was kept over night to check for any ill effects after being caught in a fox trap.

With the amount of bald eagles that are present throughout the winter, it is inevitable that something will happen to them. Each year we find a few birds that were shot or were drowned after being caught in a trap. This year we received a call from a fox trapper who had an eagle in his trap. We went out and released the bird which was lucky to have no damage done. We brought the bird back to the warehouse and kept it through the night to make sure there was nothing wrong with him. He was released the next morning with no ill effects.

G. Fish

Fishing is the most popular drawing attraction to the Savanna District. During FY-75, almost 330,000 people enjoyed this sport. Species most commonly fished for include channel catfish, walleye, crappie, fresh-water drum, sunfish and bullhead. The main river system including the locks and wingdam system provide ample opportunities for the walleye and channel catfish fishermen. Each year, walleyes in the 5 to 10 pound class are caught off the river.

Fall and winter fishing provides some excellent panfish catches in the backwater lakes and sloughs.

The Spring Lake area, located just south of Savanna, remains one of the hottest places for channel catfish and fresh-water drum.

Although fishing remains good at certain times of the year, it is a resource that is being hurt by large scale siltation occurring on the river. You can only assume that as we lose more and more important marsh and backwater habitat, do to siltation, that our fishery resource will also decline at a comparable rate. Spawning and rearing areas are being lost and no new areas are being created.

Every year, more and more people come to enjoy the fishery resource on the refuge, yet every year there are fewer and fewer accessable places for these people to fish.

H. Reptiles

No records are kept on reptiles inhabiting the district. The sand prairie area includes some species such as the Blandings turtle, six-lined race runner, western box turtle, and plains hog-nose snake which are otherwise uncommon to the refuge.

Certain species such as the bullfrog, snapping turtle, and soft-shelled turtle are avidly sought after by some sportmen for delicious meals.

Timber rattlesnakes and massasauga rattlers are present on the refuge but in limited numbers. The bluffs surrounding the refuge contain real healthy populations of timber rattlesnakes, however.

I. Disease

Nothing to report.

III. REFUGE DEVELOPMENT AND MAINTENANCE

A. Physical Development:

No new physical development was planned or completed during the year. During the past few years there has been a lack of funds to complete needed facility maintenance. There are some areas on the district that will require sizeable investments in terms of maintenance and rehabilitation if we are to continue to produce current outputs.

The Spring Lake area is in current need of facility maintenance. The upper part of the area consists of a 700 acre marsh that is diked off from the Mississippi River. The development includes two water control structures one of which has a pump enabling us to effect drawdowns and reflooding. The primary outputs of this area include waterfowl maintenance, waterfowl production, and environmental education and wildlife observation. Currently a portion of the dike is in need of repair. During spring high water, wave action eroded the dike removing a considerable amount of material from the side of the dike. Subsequent high water periods will

Wave action damage to Spring Lake dike used for EE and water impoundment.

result in a breaching of the dike and thus a loss of water control in the marsh. This will allow a more rapid rate of siltation to occur in the marsh and of course the marsh water level will flucuate with the river level. Proper repairs will require building the dike to its original cross section over a .5 mile distance and then to prevent recurring damage the repaired dike slope should be reveted.

Our present level of funding does not permit us to complete this needed repair. In fact, the motor for the pump was removed due to a threat of flooding and at our present level of funding we will not be able to reinstall the pump motor and purchase the electricity needed for its operation in future fiscal years.

The Pleasant Creek area located in Iowa, just south of Bellevue, is in need of rehabilitation. During this year a token amount of work was completed on one access road with funds from FY 74. The work included placing five culverts in the road and then back-filling and rocking approximately 200 feet of the road. This road is approximately 1.5 miles long and is in need of surfacing with crushed rock. The other access road of approximately 1.5 miles provides access to two water control structures that were used to control water levels in two bottom land lakes. At present the road is impassable and requires clearing and surfacing. A portion of the road serves as a dike for the lakes and near each of the controls which serve as outlets for the lakes the road is washed-out allowing the lakes to flucuate with the river.

Heavy rains resulted in runoff that damaged the slope on the Goose Point overlook located on the southeast shore of Spring Lake. The slope was eroded in two places. Local contractor, Doty & Hoffman, donated 15 yeards of fill which was placed in the eroded cuts by refuge personnel.

B. Plantings.

1. Aquatic and Marsh Plants
Nothing to report.

2. Trees and Shrubs.
Approximately 150 autumn olive were obtained from the Illinois Department of Conservation and were planted near the warehouse at Spring Lake.

3. Upland Herbaceous Plants
Nothing to report.

4. Cultivated Crops
Approximately 280 acres are under cultivation through either cooperative farming agreements or special use permit. Crops grown include corn, soybeans, and sorghum. During 1974

crops were seeded late due to flooding and resulting crop yields were low. An early frost occurred which killed soybean plants before a crop was produced. During the spring of 1975 water receded in time to allow seeding of crops during late May and early June. Prospects for excellent yields look good at the end of the reporting period.

C. Collections and Reciepts.

1. Seed or Other Propagules
Nothing to report.

2. Specimens
November 23 an adult bald eagle was found in Pleasant Creek. The bird had a steel trap on each foot and apparently drowned in the creek. The traps were untagged and thus we were unable to determine the identity of the trapper. The specimen was frozen and transferred to Agent Orton, Rosemont, Illinois.

D. Control of Vegetation.

Approximately 1.5 miles of access road was brushed at Pleasant Creek. We plan to maintenance spray the road thus reducing the time required to keep it clear. The primary target species of this project is silver maple which is ideally suited to the river bottoms and grows so profusely that it does block roads.

Approximately 70 acres of willow was aerially sprayed with 2,4-D in Upper Spring Lake. A series of summer drawdowns of the unit have created conditions suitable for willow invasion. The application of chemical was delayed until July 10 due to high water levels. The treatment top-killed the willows but the parts of the plants under water at the time of spraying remained alive. During the spring of 1975 the willow produced some leaves but due to the fact the water level was held high the willow growth was not vigorous. We will continue to hold as much water in the unit as possible in an attempt to kill the willow.

E. Planned Burning.

Nothing to report.

F. Fires.

Nothing to report.

G. Commercial Development.

During the year we are requested to comment on various prpjects that are proposed for construction on the river. Usually the

projects as proposed would have detrimental effects to fish and wildlife habitat values. The following is a brief description of the more significant projects we commented on during the year.

Progress on the Fulton floodwall project continued slow but sure. We have provided numerous comments regarding the effects on fish and wildlife habitat that will result. Our involvement with the project stems from the fact that a part of the floodwall will cross a small parcel of refuge fee title land. Most of the issues regarding fish and wildlife habitat have been agreed to by the interested parties. One significant aspect of the project that may influence other such projects is that the F&WS is requiring landowners in the project to sign easements that would protect existing wetlands from draining or filling. The District Manager and personnel from Ecological Services, Rock Island, met with the landowners in the project area and obtained promises to sign such documents when funding would be provided for the project. The next step in the project is for the local citizens to vote on a bond issue.

An industrial park development was proposed for the Switzer Lake area near East Dubuque, Illinois. A meeting was held with the developer, Mr. F. Humpke, at which he discussed his plans which included dredging a barge channel from the main channel across refuge land to private land for a total distance of 1.25 miles. We indicated that the project would require certain permits and that construction on refuge land would require our approval. As far as we know the proposal is now a dead issue.

Interstate Power Company, Duguque, Iowa, inquired regarding the construction of a powerline crossing on the river located between Spring Lake Closed Area and the Elk River Closed Area. The crossing would be necessary to carry power from the proposed nuclear plant to be located south of Savanna to Interstate customers in Iowa. We informed Interstate that the proposed location would be unacceptable to us and proposed a crossing near the Savanna-Sabula bridge. Interstate agreed to look at alternative sites which is the current status of this development.

We were requested to provide comment for an environmental impact statement regarding an oil pipeline river crossing. The proposed crossing cuts through the Princeton wildlife area and then across numerous sloughs and islands before reaching the main channel and then the Illinois bank. We stated that this site would be unacceptable but that an acceptable alternative site was located just downstream. We do not know the present status of the project.

Interstate Power Company possessed a permit to construct a powerline crossing at Beaver Island, just south of Clinton. The crossing was not constructed and the permit was due to expire this year. Interstate requested an extension of the permit but when

requested that an environmental statement be prepared regarding the crossing Interstate declined and allowed the permit to expire.

Commonwealth Edison proposes to construct a barge docking facility at the upper end of Savanna Slough at Savanna. The facility will be used to move materials to the power plant construction site at Byron, Illinois. We provided recommendations for placement of dredged spoil which will be removed from Savanna Slough. The spoil is to be placed on adjacent Park Commission owned land in such a manner as to not fill existing wetlands. Construction is planned for next fiscal year.

Mr. Art Gill finally received a permit to construct a channel from Frentress Lake to a flooded gravel pit owned by Mr. Gill. The gravel pit will be developed into a marina and the channel will provide access to the river. Construction is planned for next fiscal year.

Main channel dredging was accomplished at only one site in the district this year. The site is located downstream from the Maquoketa River adjacent to Green Island. The spoil was pumped over the Green Island levee and piled up in a stand of predominantly silver maple trees. This should prove to be a stable spoil site.

Access channel dredging was also accomplished by the Corps at the Lazy River Marina located just north of Savanna. The spoil consisted of silt and was placed in open water adjacent to the channel. This placement of spoil is helping to fill in Savanna Bay and as a result is having detrimental effects on fish habitat.

IV. RESOURCE MANAGEMENT

A. Grazing

Nothing to report.

B. Haying

Nothing to report

C. Fur Harvest

Due to high fur prices, we issued 212 trapping permits this year which is an increase of 35% over the previous year. Following is a table that summarizes the season catch.

Furbearer	No. Taken	Total Value
Muskrat	12,335	$31675.50
Raccoon	660	6537.00
Mink	79	596.00
Beaver	268	2066.00
Oppossum	113	100.50
Red Fox	9	209.00
Grey Fox	10	107.00
TOTAL	13,474	$41291.00

Note: These are actual figures based on returns from 85% of the trapping permittees.

This was the first year that the beaver season was open in Illinois since 1969. Due to the low price of the pelts, very few people trapped these animals. We are in the process of developing a management program for beaver in conjunction with the states of Illinois and Iowa. The program will revolve around open and closed seasons to insure that we maintain a relatively high population on the river and at the same time can control the population if it gets too high or too low.

Although there were 55 more trappers working the river this year, almost 20% less muskrats were caught than the year before. Muskrat and mink were the only 2 furbearers that had a decline in catch. Average prices for muskrat and raccoon were $2.60 and $10.00 respectively. These two along with fox keep going up while mink and beaver keep going down.

D. Timber Removal

Nothing to report.

E. Commercial Fishing

Commercial fishing is a way of life for many people along the Mississippi River. This activity is allowed under state regulations on the refuge except for the Spring Lake area where a refuge permit is required. Thirty-six commercial fishing permits were issued this fiscal year. Only 15 returns have been received to date and that information is summarized in the following table.

Species	Pounds Taken	Value/Pound
Buffalo	24271	$0.18
Carp	10615	0.05
Freshwater drum	15560	0.15
Paddlefish	2040	0.15
TOTAL	52486	

All commercial fish except for channel catfish are allowed to be taken in the Spring Lake area.

F. Other Uses

One miscellaneous permit was issued for $5.00 for the removal of two cabins that leases had been terminated on. No other new permits were granted or terminated during the period. Three permits were renewed. Permits still in effect, except cooperative farming permits, which are administered by the refuge are as follows:

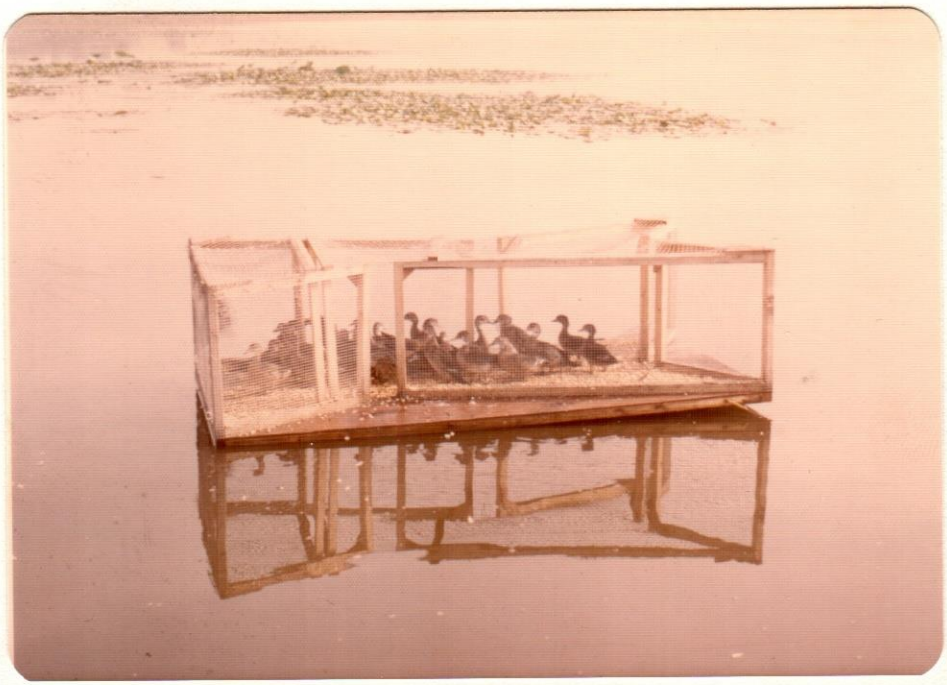
Bonnett Boat Docks	$180.00
Bowfin Yacht Club	40.00
Dubuque Barge & Fleeting	350.00
Potter Cash Farming	272.10
Simpson Building Rental	25.00

V. FIELD INVESTIGATION OR APPLIED RESEARCH

A. Wood duck Banding Program

A FY-75 target of 200 birds was given to the Savanna District. A total of 318 birds were banded before we quit because some of the other districts were having trouble getting their quotas.

This year was the first year that we employed a new capturing technique. Two 8' x 4' floating traps were used. One of the traps had expandable throats and the other one had fixed throats. The two traps were placed no more than 30 feet apart. The trap with expandable throats was victimized almost every night by raccoon while the trap that had fixed throats never received any raccoon predation. We are just guessing, but the fact that the raccoon couldn't enlarge this opening may have been why they didn't bother this trap. Next fiscal year we are planning on building 3 more of these traps and they all will have solid throats.



One of our floating wood duck traps showing design and catch.

In 10 days we banded 184 wood ducks out of these two traps. About 80% of these came out of the trap that wasn't being victimized by coon.

We feel that the use of these traps may be very beneficial to any station that is trapping ducks where water levels are continuouslyffluctuating as they do on the river.

One trap captured 33 wood ducks at one time and there was room for more. A couple of these traps could work as well as a cannon-net.

We feel that these traps have some advantages over some of the other methods employed. (1) Aside from prebaiting an area, very little grain is needed. (2) The birds are always dry, easy to catch, and easy to handle. (3) Once the traps are in place, they will work for you regardless of water level. (4) You don't have to maintain an area like you would for a cannon-net site. (5) The fixed throat design may be a coon proof system.

The one major disadvantage to these traps is that you have to visit these traps every morning and evening when they are operating.

B. Mourning Dove Trapping

No quota was received for mourning doves this year.

C. Natural Areas - Thomson Sand Area

Work was carried out this fiscal year in an attempt to get a native sand prairie area included as a natural area. The Thomson Sand area is a 200 acre remnant of native sand prairies which used to be common in northern Illinois. This area is one of the few left in Illinois and is characterized by such prairie grasses as little blue stem, Indian grass, Fall witch grass, porcupine grass, switch grass and June grass.

The prickley-pear cactus is very common on the Thomson Sand Area.

It also contains distinctive flora such as prickley pear cactus, poppy mallow, goats rue, sand primrose and hairy puccoon.

Such herpetofauna as the plains hognose snake, Blandings turtle,

Production this Spring was sharply curtailed by the third largest flood in recorded history. All of the nesting boxes are placed at an average height of 15 feet off the ground but when the Mississippi River rises 17 feet, they might as well be two feet off the ground. Needless to say, most of our boxes were flooded. The wood ducks were already into incubation and the effects this years flooding had on production will not be known until this winter when we do our survey.

Incubation was in early stages so we hope that a good renesting attempt was made by these birds.

E. Hooded Merganser Egg Collection

In the Spring of 1975, we cooperated with the Patuxent Wildlife Research Center on the collection of clutches of hooded merganser eggs for pesticide studies. Three clutches, totaling 33 eggs were collected for this study from the Pleasant Creek Unit.

western box turtle, and Illinois mud turtle are considered to be rare in this area but all are found to be present on the Thomson Sand Area.

We feel and the state of Illinois feels that this area is of considerable scientific value and should thus be protected. The recommendations and management plans are still in the mill. It is our hope that this project will be approved.

D. Wood Duck Nest Box Survey

The Pleasant Creek unit is being developed into an intensive study area for the placement and use of artificial wood duck nesting structures.

In past years, wood duck boxes were scattered throughout the entire district. After years and years of data collection that showed no significant structure use except in the Pleasant Creek unit, we started collecting these boxes and moving them into the Pleasant Creek unit.

These boxes are checked for use and repairs are made if needed during the winter months. The data for fiscal year 1975 has not been collected to date. Fiscal year 1974 data showed that 59 boxes were available and 28 or 47.5% of them were used. Of these 28 boxes, 16 were used by wood ducks, 8 by hooded mergansers, and 4 were used both by wood ducks and hooded mergansers.

Average hatch for wood duck clutch was 5.5 and average hatch for hooded merganser was 3.9.

Forty more boxes were installed in the Pleasant Creek unit this Spring, bringing the total available boxes to almost 100.

This box contained a clutch of 15 wood duck eggs.

VI. PUBLIC RELATIONS

A. Recreational Uses

The Mississippi River, is one of the greatest out-of-door playgrounds in the midwest. With our area of influence including Chicago, which is only a three hour drive away, and many other large metropolitan areas, our public use is ever increasing.

During the fiscal year, we recorded 818, 600 public use visits to the district. This figure, although seemingly quite large, is undoubtedly low. With more than 80 public access sites to the river and more being built each year it is a difficult task to try and keep track of people using the refuge.

About 30% of the visits are non-wildlife/wildlands oriented--which includes camping, picnicking, swimming, boating and water-skiing. The majority of the people come to the refuge for fishing, hunting, wildlife observation and wildlands appreciation.

B. Refuge Participation

This year we again participated with the Thomson Eco-center in an environmental education program. The center uses our Spring Lake auto tour route as an outdoor classroom. Participation totalled 641 students. Conducted tours by refuge personnel totalled 362 students, teachers, and Audubon groups.

Our bottomland nature trail received 3040 visits and there were 6125 visits to the interpretive center which we administer in conjunction with the Mississippi Palisades State Park. Refuge personnel also presented 15 one-half hour radio programs over WCCI in Savanna. In addition, numerous programs were given to schools and civic organizations.

C. Hunting

Game hunting of one type or another occurs from mid-August until the 1st of March. The Savanna district is split between the states of Iowa, Illinois, and a small portion of Wisconsin. Hunting seasons and regulations become quite a hodge-podge and are sometimes difficult to keep straight.

Except for three closed areas on the district, which represent only 14% of the refuge, the rest of the refuge is open to the public for hunting in accordance with state regulations. Almost 38,000 acres of the refuge is open to hunters.

Waterfowl hunting, white-tail deer hunting, and dove hunting are the three hunts which attract the largest number of hunters. The waterfowl season attracts most of the hunters. This fiscal year, 17527 hunter visits were recorded. These hunters accounted for the taking of 13805 ducks which averages out to .78 ducks/hunter for the season.

Opening weekends in Iowa and Illinois account for almost 40% of the hunters and 50% of the birds killed. After the first few days, the birds quickly adjust their habits to loafing in the closed areas and feeding early in the morning and late in the evening. They even adjust their flight patterns out of the closed areas. In cases of firing line situations, the ducks and geese will be flying low until they cross an imaginary point just before they get out of the closed area and will climb 70 to 80 yards to escape the onslaught that is waiting for them.

Although there are 38,000 acres of refuge open to hunting, 50% of the waterfowl hunters will congregate in four different areas every year. Each year the same complaints are heard and usually from the same hunters--"Where's all the ducks?", "Them damn skybusters!", "Isn't there a lot of hunters out today?"--The list goes on and on.

Methods of hunting between Iowa and Illinois are like night and day. Iowa is open to hunting with no restrictions on methods except for federal guidelines. In Illinois, on the Mississippi River in this area, you have to hunt from a blind that cannot be closer than 200 yds from the next blind. This regulation has merit over open hunting but it also has drawbacks. Blind-burning has become a common practice that is going to end up some day on a serious note. Also, the blinds are built on a first come first serve basis. What usually happens is that a hunter will be assured of having the same blind year after year because his blind is located in that area. As it is right now, all available hunting sites in the "hot" areas are taken. A fair chance is not being given to all of the people who want to enjoy this sport.

Illinois elected not to take the early teal season this year. This was the first time since the teal season has been offered that Illinois declined it. Because we did not have the season, a lot of wood ducks got to live a little longer. It seems that quite a few teal hunters think that wood ducks and blue-winged teal are the same bird.

The deer seasons in Iowa and Illinois accounted for 51 deer being taken on the refuge. Six of these fell to bow and arrow hunters. The Pleasant Creek unit in Iowa remains the top deer hunting area on the district.

D. Violations

Law enforcement activity on the Savanna District could be a 24 hour job with arrests being made constantly each day. This year as in past years, it has been difficult to find time to actively work law enforcement. Aside from spending time on opening weekends of seasons and trying to keep our eyes on people whenever we are working on some other project, very little actual time goes into law enforcement. The problem with law enforcement is that it takes time and that is a quantity that people in refuges have very little extra of.

Violators were processed in Federal or State court, depending upon the circumstances of the case.

E. Safety

No accidents or injuries involving Savanna District personnel occurred during the fiscal year. A safety presentation is given at each staff meeting as a refresher course on different topics. We attended an eight hour Defensive Driving Course given by the Regional Safety Officer. Safety devices such as fire extinguishers and first aid kits were installed in all vehicles and buildings.

VII. OTHER ITEMS

At a January meeting with the Corps and various other agencies GREAT II was formed. GREAT II covers the Rock Island Corps district on the Upper Mississippi River. During the spring the various work groups were formed and meetingsheld to develop objectives and plans of action. We are members of three work groups including Fish and Wildlife, Dredging Requirements and Side Channel Openings. At present GREAT II has no operating funds but a budget proposal was submitted for funding during the next fiscal year. Other than organization GREAT II has accomplished little to date.

SIGNATURE PAGE

Submitted by:

Thomas D. Atkins
(Signature)

12-6-75
(Date)

District Manager
(Title)

Approved, Regional Office:

Date: _____

_____
(Signature)

Regional Refuge Supervisor

PPUM-1

DISTRICT: SAVANNA MONTH: JULY F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 7/6	7/13	7/20	7/27	8/3	MONTHLY TOTAL	AVERAGE
COOT	21700	500	650	650	650	650	3100	620
SWAN								
CANADA GOOSE	4585	115	135	135	135	135	655	131
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE	4585	115	135	135	135	135	655	131
MALLARD	51100	1100	1550	1550	1550	1550	7300	1460
BLACK								
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL	3325	75	100	100	100	100	475	95
B.W. TEAL	18900	500	550	550	550	550	2700	540
SHOVELER								
WOOD DUCK	79800	1800	2400	2400	2400	2400	11400	2280
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE								
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER								
RED BR. MERGANSER								
HOODED MERGANSER	11900	260	360	360	360	360	1700	340
TOTAL DUCKS	165025	3735	4960	4960	4960	4960	23575	4715

PPUM-1

DISTRICT: SAVANNA MONTH: August F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 8/10	8/17	8/24	8/31	MONTHLY TOTAL	AVERAGE
COOT	18200	650	650	650	650	2600	650
SWAN							
CANADA GOOSE	4305	135	160	160	160	615	154
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE	4305	135	160	160	160	615	154
MALLARD	70350	1550	2100	2600	3800	10050	2513
BLACK	3150	50	100	100	200	450	113
GADWALL	140				20	20	5
WIDGEON	140				20	20	5
PINTAIL	1680	10	30	80	120	240	60
G.W. TEAL	5110	100	130	210	290	730	183
B.W. TEAL	25200	550	650	950	1450	3600	900
SHOVELER							
WOOD DUCK	76300	2600	2600	2800	2900	10900	2725
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	10640	360	360	400	400	1520	380
TOTAL DUCKS	192710	5220	5970	7140	9200	27530	6884

PPUM-1

DISTRICT: SAVANNA MONTH: September F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 9/7	9/14	9/21	9/28	MONTHLY TOTAL	AVERAGE
COOT	49840	650	700	1950	3820	7120	1780
SWAN							
CANADA GOOSE	7910	160	200	350	420	1130	283
WHITE FRONT							
SNOW/BLUE	595		10	30	45	85	21
OTHER							
TOTAL GEESE	8505	160	210	380	465	1215	304
MALLARD	131600	4200	4200	4600	5800	18800	4700
BLACK	9520	260	300	330	470	1360	340
GADWALL	2590	75	75	90	130	370	93
WIDGEON	5460	130	130	210	310	780	195
PINTAIL	9240	190	210	430	490	1320	330
G.W. TEAL	21630	380	560	840	1310	3090	773
B.W. TEAL	54390	1620	1810	2450	1890	7770	1943
SHOVELER	1435	30	40	60	75	205	51
WOOD DUCK	153300	3400	4500	6800	7200	21900	5475
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	11620	400	420	420	420	1660	415
TOTAL DUCKS	400785	10685	12245	16230	18095	57255	14315

PPUM-1

DISTRICT: SAVANNA MONTH: October F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 10/5	10/12	10/19	10/26	11/2	MONTHLY TOTAL	AVERAGE
COOT	847280	14500	29650	24170	30205	22470	121040	24208
SWAN w Histling	42				3	3	6	1
CANADA GOOSE	18515	465	380	630	650	520	2645	529
WHITE FRONT								
SNOW/BLUE	12635	45	140	500	550	570	1805	361
OTHER								
TOTAL GEESE	31150	510	520	1130	1200	1090	4450	890
MALLARD	737170	9700	16900	21400	24370	32940	105310	21062
BLACK	29225	660	1080	710	805	920	4175	835
GADWALL	15610	160	210	820	460	580	2230	446
WIDGEON	141330	1380	2570	7800	5210	3230	20190	4038
PINTAIL	84700	650	900	5800	2790	1960	12100	2420
G.W. TEAL	130830	1800	2150	8510	2930	3300	18690	3738
B.W. TEAL	13545	890	190	50	455	350	1935	387
SHOVELER	5390	110	170	60	140	290	770	154
WOOD DUCK	126540	5800	4730	3940	2850	760	18080	3616
REDHEAD	4060			180	160	240	580	116
CANVASBACK	5915			35	200	610	845	169
RING-NECK	3815	30	60	50	135	270	545	109
SCAUP	344750			7050	18790	23410	49250	9850
GOLDENEYE	280					40	40	8
BUFFLEHEAD	280					40	40	8
RUDDY	9030			10	120	1160	1290	258
OLD SQUAW								
SCOTER								
COMMON MERGANSER	140					20	20	4
RED BR. MERGANSER	560			10	20	50	80	16
HOODED MERGANSER	3290	280	90	30	20	50	470	94
TOTAL DUCKS	1656480	21460	29050	56455	59455	70220	236640	47328

PPUM-1

DISTRICT: SAVANNA MONTH: November F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 11/9	11/16	11/23	11/30	MONTHLY TOTAL	AVERAGE
COOT	20055	2060	670	90	45	2865	716
SWAN Whistling	378	18	34	1	1	54	14
CANADA GOOSE	11550	140	230	560	720	1650	413
WHITE FRONT							
SNOW/BLUE	2905	210	110	50	45	415	104
OTHER							
TOTAL GEESE	14455	350	340	610	765	2065	517
MALLARD	567385	21515	19340	21235	18965	81055	20264
BLACK	20090	830	765	570	705	2870	718
GADWALL							
WIDGEON	910		30	100		130	33
PINTAIL	560	50	30			80	20
G.W. TEAL	19040	1485	830	260	145	2720	680
B.W. TEAL							
SHOVELER							
WOOD DUCK	490	70				70	18
REDHEAD	16975	1120	840	245	220	2425	606
CANVASBACK	107870	6085	5400	2245	1680	15410	3853
RING-NECK	280	30	10			40	10
SCAUP	540085	47300	18620	5605	5630	77155	19289
GOLDENEYE	1365	35	70	30	60	195	49
BUFFLEHEAD	8190	690	450	15	15	1170	293
RUDDY	35245	3050	1265	460	260	5035	1259
OLD SQUAW							
SCOTER							
COMMON MERGANSER	2520	45	45	75	195	360	90
RED BR. MERGANSER	2590		15	135	220	370	93
HOODED MERGANSER	630	25	35	15	15	90	23
TOTAL DUCKS	1324225	82330	47745	30990	28110	189175	47298

PPUM-1

DISTRICT: SAVANNA MONTH: DECEMBER F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 12/7	12/14	12/21	12/28		MONTHLY TOTAL	AVERAGE
COOT	140	10	10				20	5
SWAN Whistling	21	2	1				3	1
CANADA GOOSE	8575	610	470	115	30		1225	306
WHITE FRONT								
SNOW/BLUE	70	10					10	3
OTHER								
TOTAL GEESE	8645	620	470	115	30		1235	309
MALLARD	295120	16240	12110	9360	4450		42160	10540
BLACK	6895	415	320	160	90		985	246
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL	245	35					35	9
B.W. TEAL								
SHOVELER								
WOOD DUCK								
REDHEAD	1330	160	30				190	48
CANVASBACK	3990	430	140				570	143
RING-NECK								
SCAUP	30100	3210	950	140			4300	1075
GOLDENEYE	5670	170	330	220	90		810	203
BUFFLEHEAD	210	15	15				30	8
RUDDY	770	110					110	28
OLD SQUAW								
SCOTER								
COMMON MERGANSER	10955	390	670	410	95		1565	391
RED BR. MERGANSER	3010	240	160	30			430	108
HOODED MERGANSER	105	15					15	4
TOTAL DUCKS	358400	21430	14725	10320	4725		51200	12803

PPUM-1

DISTRICT: SAVANNA MONTH: JANUARY F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 1/4	1/11	1/18	1/25	2/1	MONTHLY TOTAL	AVERAGE
COOT								
SWAN								
CANADA GOOSE	420	30	30				60	12
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE	420	30	30				60	12
MALLARD	29400	1800	600	600	600	600	4200	840
BLACK								
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL								
B.W. TEAL								
SHOVELER								
WOOD DUCK								
REDHEAD								
CANVASBACK								
RING-NECK								
SCAUP								
GOLDENEYE	11200	240	340	340	340	340	1600	320
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER	13650	150	450	450	450	450	1950	390
RED BR. MERGANSER								
HOODED MERGANSER								
TOTAL DUCKS	54250	2190	1390	1390	1390	1390	7750	1550

PPUM-1

DISTRICT: SAVANNA MONTH: FEBRUARY F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 2/8	2/15	2/22	3/1		MONTHLY TOTAL	AVERAGE
COOT								
SWAN								
CANADA GOOSE	1400	40	40	60	60		200	50
WHITE FRONT								
SNOW/BLUE								
OTHER								
TOTAL GEESE	1400	40	40	60	60		200	50
MALLARD	17500	600	600	600	700		2500	625
BLACK								
GADWALL								
WIDGEON								
PINTAIL								
G.W. TEAL								
B.W. TEAL								
SHOVELER								
WOOD DUCK	70				10		10	3
REDHEAD	70				10		10	3
CANVASBACK	70				10		10	3
RING-NECK								
SCAUP	140				20		20	5
GOLDENEYE	10920	340	340	410	470		1560	390
BUFFLEHEAD								
RUDDY								
OLD SQUAW								
SCOTER								
COMMON MERGANSER	12880	450	450	450	490		1840	460
RED BR. MERGANSER								
HOODED MERGANSER								
TOTAL DUCKS	41650	1390	1390	1460	1710		5950	1489 1489

PPUM-1

DISTRICT: SAVANNA MONTH: MARCH F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 3/8	3/15	3/22	3/29	MONTHLY TOTAL	AVERAGE
COOT	18970			150	2560	2710	678
SWAN whistling	28				4	4	1
CANADA GOOSE	18480	60	400	260	1920	2640	660
WHITE FRONT	70				10	10	3
SNOW/BLUE	210				30	30	8
OTHER							
TOTAL GEESE	18760	60	400	260	1960	2680	670
MALLARD	187845	700	1100	1400	23635	26835	6709
BLACK	6685			10	945	955	239
GADWALL	1890			10	260	270	68
WIDGEON	18725			330	2345	2675	669
PINTAIL	30065			520	3775	4295	1074
G.W. TEAL	5950			260	590	850	213
B.W. TEAL	3500			10	490	500	125
SHOVELER	14805			70	2045	2115	529
WOOD DUCK	15120	10	200	630	1320	2160	540
REDHEAD	13230	10	200	460	1220	1890	473
CANVASBACK	76475	10	1160	4735	5020	10925	2731
RING-NECK	14035		40	135	1830	2005	501
SCAUP	559265	140	2670	8320	68765	79895	19974
GOLDENEYE	18865	470	550	750	925	2695	674
BUFFLEHEAD	5530		30	125	635	790	198
RUDDY	4025			60	515	575	144
OLD SQUAW							
SCOTER							
COMMON MERGANSER	24500	520	710	735	1535	3500	875
RED BR. MERGANSER	2205		10	110	195	315	79
HOODED MERGANSER	3815			80	465	545	136
TOTAL DUCKS	1006530	1860	6670	18750	116510	143790	35948

PPUM-1

DISTRICT: SAVANNA MONTH: APRIL F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 4/5	4/12	4/19	4/26	5/3	MONTHLY TOTAL	AVERAGE
COOT	274120	4870	7810	9140	10580	6760	39160	7832
SWAN Whistling	343	44	4	1			49	10
CANADA GOOSE	13573	1160	490	199	45	45	1939	388
WHITE FRONT								
SNOW/BLUE	210	30					30	6
OTHER								
TOTAL GEESE	13783	1190	490	199	45	45	1969	394
MALLARD	275345	18145	12230	5080	2260	1620	39335	7867
BLACK	12355	870	465	310	90	30	1765	353
GADWALL	70385	780	1445	4755	2305	770	10055	2011
WIDGEON	193620	4620	5215	11925	4550	1350	27660	5532
PINTAIL	51170	4190	2950	140	30		7310	1462
G.W. TEAL	28280	760	1935	1095	210	40	4040	808
B.W. TEAL	81795	1180	2765	4100	2450	1190	11685	2337
SHOVELER	56175	2230	2825	2480	335	155	8025	1605
WOOD DUCK	45710	1560	1370	1200	1200	1200	6530	1306
REDHEAD	32935	1715	1660	1095	205	30	4705	941
CANVASBACK	69825	5645	3190	1065	65	10	9975	1995
RING-NECK	107835	3170	6265	4980	780	210	15405	3081
SCAUP	1196090	61430	47220	38070	17120	7030	170870	34174
GOLDENEYE	12670	1340	335	135			1810	362
BUFFLEHEAD	7630	420	410	260			1090	218
RUDDY	63840	1140	2675	4885	390	30	9120	1824
OLD SQUAW								
SCOTER								
COMMON MERGANSER	14560	1280	740	60			2080	416
RED BR. MERGANSER	4655	365	220	80			665	133
HOODED MERGANSER	10430	410	300	260	260	260	1490	298
TOTAL DUCKS	2335305	111250	94215	81975	32250	13925	333615	66723

PPUM-1

DISTRICT: SAVANNA MONTH: MAY F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 5/10	5/17	5/24	5/31	MONTHLY TOTAL	AVERAGE
COOT	44800	3600	1100	900	800	6400	1600
SWAN							
CANADA GOOSE	1260	45	45	45	45	180	45
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE	1260	45	45	45	45	180	45
MALLARD	28000	1240	1060	850	850	4000	1000
BLACK	140	10	10			20	5
GADWALL	3780	420	110	10		540	135
WIDGEON	4970	580	130			710	178
PINTAIL							
G.W. TEAL	70	10				10	3
B.W. TEAL	13650	880	470	300	300	1950	488
SHOVELER	420	30	30			60	15
WOOD DUCK	33600	1200	1200	1200	1200	4800	1200
REDHEAD	210	30				30	8
CANVASBACK							
RING-NECK	420	60				60	15
SCAUP	27090	3240	630			3870	968
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	7280	260	260	260	260	1040	260
TOTAL DUCKS	119630	7960	3900	2620	2610	17090	

PPUM-1

DISTRICT: SAVANNA MONTH: JUNE F.Y. 75

WATERFOWL POPULATIONS	DAYS USE FOR PERIOD	Week ending: 6/7	6/14	6/21	6/28	MONTHLY TOTAL	AVERAGE
COOT	22400	800	800	800	800	3200	800
SWAN							
CANADA GOOSE	1260	45	45	45	45	180	45
WHITE FRONT							
SNOW/BLUE							
OTHER							
TOTAL GEESE	1260	45	45	45	45	180	45
MALLARD	23800	850	850	850	850	3400	850
BLACK							
GADWALL							
WIDGEON							
PINTAIL							
G.W. TEAL							
B.W. TEAL	8400	300	300	300	300	1200	300
SHOVELER							
WOOD DUCK	33600	1200	1200	1200	1200	4800	1200
REDHEAD							
CANVASBACK							
RING-NECK							
SCAUP							
GOLDENEYE							
BUFFLEHEAD							
RUDDY							
OLD SQUAW							
SCOTER							
COMMON MERGANSER							
RED BR. MERGANSER							
HOODED MERGANSER	7280	260	260	260	260	1040	260
TOTAL DUCKS	73080	2610	2610	2610	2610	10440	2610

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

VISITS BY MONTH

SAVANNA DISTRICT
03-2527-06-SVD

ACTIVITY NAME	JUL-74	AUG-74	SEP-74	OCT-74	NOV-74	DEC-74	JAN-75	FEB-75	MAR-75	APR-75	MAY-75	JUN-75	12 MONTH TOTAL
INTERPRETATION													
WILDL TRAILS-NONMOTOR													
SELF GUIDED	800	800	200	100	20					70	400	650	3040
GUIDE TOUR OT-MOTORIZED													
SELF GUIDED									15	12			27
CONDUCTED				274	9							6	289
INTERPRETIVE CENTER	1200	1200	400	25							1600	1700	6125
OTHER PROGRAMS										144			144
EDUCATION													
STUDENTS				135	574								709
TEACHERS									2				2
PROF SERVICES RENDERED	1	3						1	2	5	5	5	22
RECREATION-WILDLIFE WILDLANDS													
HUNTING MIGRATORY BIRDS													
DUCKS				9450	8623	860							17933
GEESE				1690	453	50							2193
HUNTING MIG BIRDS-OTHER			450	200				10					660
HUNTING RESIDENT GAME													
UPLAND GAME BIRDS					195	230	120						545
BIG GAME, DEER-GUN													
WHITE-TAILED DEER					160	390							550
BIG GAME, DEER-BOW													
WHITE-TAILED DEER				120	180	70							370
SMALL GAME				320	105	270	120	80					895
OTHER GAME					200								200
FISHING													
SALTWATER	50050	51640	38730	27003	12900	14250	9500	10600	8400	17250	39420	49290	327140
CLAMS,CRABS,OYSTERS	1470	1610	330									870	4750
OTHER CONSUMPT W/W REC									10	10	200	40	260
WILDLIFE OBSERVATION													
FOOT	500	400	300	400	50	80	60	70	210	580	610	580	3840
AUTO	4500	4500	3375	3000	3500	1300	900	1200	2600	3700	3450	3850	36375
BOAT (NONMOTORIZED)	1000	800	600	250	50	10				40	280	740	3770
WILDLANDS APPRECIATION													
FOOT	1500	1200	600	400	3150	2780	1200	450	230	630	730	1110	13980
AUTO	42167	38200	19100	15000	7000	5300	4050	4650	13400	17600	31290	34610	232367
BOAT	31550	31940	15920	7500	250	60			1800	3800	21610	28470	142800
PHOTOGRAPHY	120	250	200	800	300	300	20	30	140	230	250	300	2440
RECREATION NON-WILDLIFE													
CAMPING	13250	14100	7050	5700	150	30				130	9640	11970	61920

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

VISITS BY MONTH

SAVANNA DISTRICT
03-2527-36-SVD

ACTIVITY NAME	JUL-74	AUG-74	SEP-74	OCT-74	NOV-74	DEC-74	JAN-75	FEB-75	MAR-75	APR-75	MAY-75	JUN-75	12 MONTH TOTAL
PICNICKING	9930	9520	4450	3000	100					260	3230	5890	35590
SWIMMING	22080	25280	6345	1000						20	2100	14150	71165
BOATING	33500	37600	18830	10303	3003	373			360	11300	23480	29350	168060
WATER SKIING	32390	22500	5625	500							1700	18460	81175
TOTAL INTERPRETATION	2000	2000	600	300	20				15	226	2000	2356	9625
TOTAL EDUCATION	1	3		135	574			1	4	5	5	5	733
TOTAL HUNTING			450	10780	9916	1870	240	90					23346
TOTAL FISHING	51520	53250	39530	27003	12003	14250	9500	10600	8400	17250	39420	49160	331890
TOTAL OTHER W/W RECREATION	81337	77190	40035	26850	14200	10330	6220	6400	18390	26590	59420	69700	435832
TOTAL PUBLIC USE	244918	240943	122955	86564	40069	26850	15970	17091	27169	55781	140085	200941	1219336
TOTAL WILDLIFE ORIENTED	134868	132443	80675	65164	36819	26450	15970	17091	26809	44071	99845	121221	801426
TOTAL NON-WILDLIFE ORIENTED	110050	108500	42280	21400	3250	400			360	11710	40240	79720	417910
NO. VISITS TO REFUGE	188413	140950	93000	66240	25080	19500	12000	13500	16165	31500	87200	124066	818614

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
SPECIAL RECOGNITION SPECIES
(EXCLUDING WATERFOWL)
FY-75

SAVANNA DISTRICT
03-3527-06-SVD

SPECIES NAME	LINE CODE	USE DAYS JUL-SEP 74	USE DAYS OCT-DEC 74	USE DAYS JAN-MAR 75	USE DAYS APR-JUN 75	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
THREATENED SPECIES										
ENDANGERED										
AMERICAN PEREGRINE FALCON	701 3561	0	14	21	14	49	0	0	1	10/19
STATUS-UNDETERMINED										
OSPREY	704 3640	168	126	0	42	336	0	0	6	09/28
SPECIAL RECOGNITION										
BIRDS										
HORNED GREBE	711 0030	63	0	0	0	63	0	0	3	07/20
EARED GREBE	711 0040	0	0	0	350	350	0	0	20	04/26
PIED-BILLED GREBE	711 0060	5390	14000	2870	23870	46130	10	0	500	10/19
COMMON LOON	711 0070	0	21	28	56	105	0	0	4	03/29
HERRING GULL	711 0510	910	9240	20300	32900	63350	0	0	800	03/22
RING-BILLED GULL	711 0540	10850	56000	100100	204400	371350	0	0	4800	04/19
FRANKLIN'S GULL	711 0590	420	280	0	1190	1890	0	0	60	04/26
BONAPARTE'S GULL	711 0600	0	0	0	420	420	0	0	20	04/26
COMMON TERN	711 0700	4480	1470	0	2520	8470	0	0	130	04/26
BLACK TERN	711 0770	1050	420	0	350	1820	0	0	50	09/28
DOUBLE-CRESTED CORMORANT	711 1200	14560	20510	0	14910	49980	25	0	750	10/12
AMERICAN BITTERN	711 1900	2310	770	560	2870	6510	0	0	50	05/03
LEAST BITTERN	711 1910	1050	490	0	875	2415	0	0	20	09/07
GREAT BLUE HERON	711 1940	5460	25130	1890	38850	120470	300	0	750	08/31
GREAT (COMMON) EGRET	711 1960	24500	2870	0	10640	38010	80	0	350	08/24
CATTLE EGRET	711 2001	0	0	0	140	140	0	0	10	05/03
GREEN HERON	711 2010	29400	4200	0	14000	47600	150	0	400	08/31
BLACK-CROWNED NIGHT HERON	711 2020	7560	1050	0	4760	13370	20	0	120	08/31
YELLOW-CROWND NIGHT HERON	711 2030	210	0	0	0	210	0	0	10	09/14
SORA	711 2140	29400	5390	0	24850	59640	0	0	500	09/07
AMERICAN WOODCOCK	711 2280	1260	2450	210	6580	10500	0	0	130	10/12
COMMON SNIPE	711 2300	9100	9870	1610	18830	39410	0	0	400	04/26
LEAST SANDPIPER	711 2420	5950	1750	0	2450	10150	0	0	100	09/21
SEMIPALMATED SANDPIPER	711 2460	1260	350	0	1050	2660	0	0	60	04/26
SANDERLING	711 2480	1190	140	0	0	1330	0	0	40	09/07
GREATER YELLOWLEGS	711 2540	490	280	0	4620	5390	0	0	130	04/26
LESSER YELLOWLEGS	711 2550	2940	1680	0	13230	17850	0	0	300	04/26
SPOTTED SANDPIPER	711 2630	15400	3220	70	9380	28070	0	0	250	09/14
KILLDEER	711 2730	25200	16100	1680	30660	73640	0	0	600	04/26
MOURNING DOVE	711 3160	0	0	0	0	169750	0	870	1800	08/31
TURKEY VULTURE	711 3250	3990	1470	0	4900	10360	0	0	80	04/26
MARSH HAWK	711 3310	1260	1890	1120	1890	6160	0	0	50	10/12
SHARP-SHINNED HAWK	711 3320	0	280	0	0	280	0	0	10	10/05
COOPER'S HAWK	711 3330	140	280	140	770	1330	0	0	30	04/26

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
SPECIAL RECOGNITION SPECIES
(EXCLUDING WATERFOWL)
FY-75

SAVANNA DISTRICT
03-3527-06-SVD

SPECIES NAME	LINE CODE	USE DAYS JUL-SEP 74	USE DAYS OCT-DEC 74	USE DAYS JAN-MAR 75	USE DAYS APR-JUN 75	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
RED-TAILED (HARLAN) HAWK	711 3370	4480	4410	4200	5810	18900	0	0	130	04/19
RED-SHOULDERED HAWK	711 3390	0	0	0	140	140	0	0	10	04/19
BROAD-WINGED HAWK	711 3430	770	910	490	2310	4480	0	0	180	04/19
ROUGH-LEGGED HAWK	711 3470	0	280	1890	1820	3990	0	0	80	04/19
BALD EAGLE	711 3520	0	5187	10430	910	16527	0	0	240	01/11
AM. KESTREL (SPARROW HAWK)	711 3600	700	980	490	2800	4970	0	0	80	04/19
SHORT-EARED OWL	711 3670	0	910	910	1085	2905	0	0	15	04/12
BARRED OWL	711 3680	10500	10920	10920	12600	44940	0	0	140	04/12
SCREECH OWL	711 3730	2730	2730	2730	3500	11690	0	0	40	04/19
GREAT HORNED OWL	711 3750	13650	13650	13650	15330	56280	0	0	170	04/12
	TOTAL	287931	221718	176309	518672	1374380	585	870		

NATIONAL WILDLIFE REFUGE SYSTEM
LAND USE INVENTORY REPORT
FY - 75

SAVANNA DISTRICT
03-3527-C6-SVD

LAND CLASSIFICATION	ACREAGE
I. DETAILED CLASSIFICATIONS	
WETLAND TYPES	
INLAND FRESH AREAS	
SEASONLY FLOOD BASIN/FLAT	5,685.0
SHALLOW FRESH MARSHES	3,358.0
DEEP FRESH MARSHES	8,300.0
OPEN FRESH WATER	20,012.0
OTHER WETLANDS	
RIVERS AND STREAMS	37.0
OTHER WETLANDS	1,725.0
UPLAND TYPES	
CROPLANDS	
NONIRRIGATED - HOT FOODS	337.0
GRASSLANDS	
NATIVE GRASSLANDS	100.0
NATIVE GRASSLANDS-RESTORD	150.0
GRASSLANDS INTRODUCED	65.0
FORESTLANDS	
COMMERCIAL FORESTS	700.0
NON-COMMERCIAL FORESTS	1,880.0
OTHER LAND TYPES	
ADMINISTRATIVE	
GENERAL	150.0
TOTAL ACRES	42,699.0
II. SUMMARY CLASSIFICATIONS	
INLAND FRESH AREAS	37,555.0
OTHER WETLANDS	1,762.0
WETLAND TYPES	39,317.0
CROPLANDS	337.0
GRASSLANDS	315.0
FORESTLANDS	2,580.0
UPLAND TYPES	3,232.0
ADMINISTRATIVE	150.0
OTHER LAND TYPES	150.0

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
(WATERFOWL ONLY)

FY-75

SAVANNA DISTRICT
03-3527-00-SVD

SPECIES NAME	LINE CODE	USE DAYS JUL-SEP 74	USE DAYS OCT-DEC 74	USE DAYS JAN-MAR 75	USE DAYS APR-JUN 75	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
WATERFOWL PRODUCTION										
NON-OUTPUT SPECIES										
AMERICAN COOT	080 2210	0	0	0	0	0	600	C	0	
SPECIAL RECOGNITION										
BIRDS										
AMERICAN COOT	711 2210	91500	747870	20340	306960	1166670	0	412	30205	10/15
WATERFOWL MAINTENANCE										
SWANS										
WHISTLING SWAN	731 1800	C	480	30	300	810	0	0	44	04/05
GEESE										
SNOW GOOSE	732 1690	630	14040	240	180	15090	0	25	570	10/05
WHITE-FRONTED GOOSE	732 1710	0	0	90	0	90	0	0	10	03/29
CANADA GOOSE	732 1720	17040	37440	21660	14340	90480	0	70	1920	03/15
DUCKS										
COMMON MERGANSER	733 1290	0	14550	51750	12480	78780	0	0	1535	03/05
RED-BREASTED MERGANSER	733 1300	0	6510	2370	3990	12870	C	C	365	04/05
HOODED MERGANSER	733 1310	34050	3630	4080	24540	66300	0	0	465	03/15
MALLARD	733 1320	260190	1555980	245220	291510	2352900	0	4214	32940	10/15
BLACK DUCK	733 1330	13590	53880	7170	10740	85380	0	198	1080	10/10
GADWALL	733 1350	2940	13380	2040	64380	82740	0	138	4755	04/10
AMERICAN WIGEON	733 1370	6000	122130	20070	171300	319500	0	276	11925	04/10
GREEN-WINGED (CINN.) TEAL	733 1390	31530	122610	6390	24330	195060	0	1398	8510	10/10
BLUE-WINGED TEAL	733 1400	101490	11610	3750	93750	210600	0	2053	4100	04/15
NORTHERN SHOVELER	733 1420	1530	4620	15870	48600	70620	0	0	2825	04/10
PINTAIL	733 1430	11700	73200	32220	43360	160960	0	198	5800	10/05
WOOD DUCK	733 1440	314400	109020	16290	111180	550890	0	2794	7200	09/15
REDHEAD	733 1460	0	23100	14280	28470	65850	0	C	1715	04/10
CANVASBACK	733 1470	0	124950	82020	59850	266820	0	C	6085	11/05
LESSER SCAUP	733 1490	0	906420	599370	1054260	2560050	0	96	68765	03/10
RING-NECKED DUCK	733 1500	0	3570	15030	92880	111480	0	138	6265	04/10
COMMON GOLDENEYE	733 1510	0	7800	41520	10860	60180	0	0	1340	04/05
BUFFLEHEAD	733 1530	0	9270	5940	6540	21750	0	60	690	11/05
RUDDY DUCK	733 1670	0	46350	4320	54720	105390	0	60	4885	04/19
	TOTAL	886590	4022610	1212060	2530020	8651280	600	12130		

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC USE REPORT

ACT HRS BY MONTH

SAVANNA DISTRICT
03-2527-26-SVD

ACTIVITY NAME	JUL-74	AUG-74	SEP-74	OCT-74	NOV-74	DEC-74	JAN-75	FEB-75	MAR-75	APR-75	MAY-75	JUN-75	12 MONTH TOTAL
INTERPRETATION													
WILDL TRAILS-NONMOTOR													
SELF GUIDED	900	900	220	100	20					70	400	650	3040
WILDL TOUR-MOTORIZED													
SELF GUIDED									30	36			66
CONDUCTED				274	12							12	298
INTERPRETIVE CENTER	1200	1200	400	25							800	850	4475
OTHER PROGRAMS										196			196
EDUCATION													
STUDENTS				200	861								1061
TEACHERS									4				4
PROF SERVICES RENDERED	2	4					1	2	5	5	5	24	
RECREATION-WILDLIFE WILDLANDS													
HUNTING MIGRATORY BIRDS													125541
DUCKS				59160	60361	6020							15359
GEESE				11832	3177	350							2620
HUNTING MIG BIRDS-OTHER			1800	800				20					
HUNTING RESIDENT GAME													1635
UPLAND GAME BIRDS					585	690	360						
BIG GAME, DEER-GUN													3300
WHITE-TAILED DEER					960	2340							
BIG GAME, DEER-BOW													1380
WHITE-TAILED DEER				480	620	280							3005
SMALL GAME				1290	715	810	360	240					600
OTHER GAME					600								
FISHING													1446230
WARMWATER	300260	309840	116130	81000	48000	57000	29000	42400	33600	69000	157680	193160	9500
CLAMS,CRABS,OYSTERS	2940	3220	1630									1740	300
OTHER CONSIST W/W REC									30	30	200	40	
WILDLIFE OBSERVATION													8880
FOOT	1530	1200	900	800	100	150	120	140	420	1160	1220	1160	51750
AUTO	9000	9000	6750	6000	2500	1800	900	1200	2600	3700	3450	3850	11270
BOAT (NONMOTORIZED)	3000	2400	1800	750	150	30				90	840	2220	
WILDLANDS APPRECIATION													29140
FOOT	1500	1200	500	400	9450	8340	3600	1350	230	630	730	1110	116100
AUTO	21000	19100	9550	7500	3500	2650	2025	2325	6700	8800	15645	17305	423750
BOAT	90000	95520	47760	22500	750	180			5400	11400	64830	85410	2440
PHOTOGRAPHY	120	250	200	300	300	300	20	30	140	230	250	300	
RECREATION NON-WILDLIFE													
CAMPING	238530	253800	176900	68400	1900	360				2340	173520	213660	1079280

NATIONAL WILDLIFE REFUGE SYSTEM
PUBLIC [illegible] REPORT

ACT HRS BY MONTH

SAVANNA DISTRICT
[illegible]

ACTIVITY NAME	JUL-74	AUG-74	SEP-74	OCT-74	NOV-74	DEC-74	JAN-75	FEB-75	MAR-75	APR-75	MAY-75	JUN-75	12 MONTH TOTAL
PICNICKING	26400	26760	12330	7800	200					790	9600	17670	102770
SWIMMING	44160	50760	12600	2000						40	4380	28300	142330
BOATING	134000	150400	94030	51500	15000	1850			1800	45200	93920	117400	705070
WATER SKIING	32390	22500	5500	1500							1700	13460	82150
TOTAL INTERPRETATION	2000	2000	600	300	32				30	302	1200	1512	8075
TOTAL EDUCATION	2	4		200	961			1	6	5	5	5	1089
TOTAL HUNTING			1800	73552	66610	10400	720	260					153440
TOTAL FISHING	303300	313060	117720	81000	49300	57000	38000	42401	33600	69000	157630	194900	1455730
TOTAL OTHER W/M RECREATION	126120	128670	67560	38250	17751	13460	6665	5045	15520	26030	87165	111395	643630
TOTAL PUBLIC USE	906962	947954	440320	324601	150261	83160	45385	47706	50956	143697	529260	703302	4373564
TOTAL WILDLIFE ORIENTED	431422	443734	187750	193401	133261	80950	45385	47706	49156	95337	246050	307812	2261964
TOTAL NON-WILDLIFE ORIENTED	475540	504220	252570	131200	17000	2210			1800	48360	283210	395490	2111600
NO. VISITS TO REFUGE	189413	140952	92000	66240	25080	12500	12000	13500	16165	31500	87200	124066	818614

NATIONAL WILDL[illegible] REFUGE SYSTEM

WATERFOWL USE DAYS

SAVANNA DISTRICT

03-3527-04-SVD

SPECIES NAME	JUL 1974-SEP 1974	OCT 1974-DEC 1974	JAN 1975-MAR 1975	APR 1975-JUN 1975	12 MONTH TOTAL
SPECIAL RECOGNITION					
BIRDS					
AMERICAN COOT	91,500	747,870	20,340	306,960	1,166,670
WATERFOWL MAINTENANCE					
SWANS					
WHISTLING SWAN	0	480	30	300	810
GEESE					
SNOW GOOSE	630	14,040	240	180	15,090
WHITE-FRONTED GOOSE	0	0	90	0	90
CANADA GOOSE	17,040	37,440	21,660	14,340	90,480
DUCKS					
COMMON MERGANSER	0	14,550	51,750	12,480	78,780
RED-BREASTED MERGANSER	0	6,510	2,370	3,990	12,870
HOODED MERGANSER	34,050	3,630	4,080	24,540	66,300
MALLARD	269,190	1,555,980	245,220	291,510	2,352,900
BLACK DUCK	13,590	53,880	7,170	10,740	85,380
GADWALL	2,040	13,380	2,040	64,380	82,740
AMERICAN WIGEON	6,000	122,130	20,070	171,300	319,500
GREEN-WINGED (COMM.) TEAL	31,530	132,810	6,300	24,330	195,060
BLUE-WINGED TEAL	101,490	11,610	3,750	93,750	210,600
NORTHERN SHOVELER	1,530	4,620	15,870	48,600	70,620
PINTAIL	11,790	73,200	32,220	43,860	160,980
WOOD DUCK	314,400	103,920	16,290	111,180	550,890
REDHEAD	0	23,100	14,280	28,470	65,850
CANVASBACK	0	134,850	82,020	59,850	266,820
LESSER SCAUP	0	904,420	599,370	1,054,260	2,560,050
RING-NECKED DUCK	0	3,570	15,030	92,880	111,480
COMMON GOLDENEYE	0	7,800	41,520	10,860	60,180
BUFFLEHEAD	0	9,270	5,940	6,540	21,750
RUDDY DUCK	0	46,350	4,320	54,720	105,390
TOTAL SWANS	0	480	30	300	810
TOTAL GEESE	17,670	51,480	21,990	14,520	105,660
TOTAL DUCKS	777,420	3,222,780	1,169,700	2,208,240	7,378,140
TOTAL WATERFOWL	886,590	4,022,610	1,212,060	2,530,020	8,651,280

NATIONAL WILDLIFE REFUGE SYSTEM

PEAK MONTHLY WATERFOWL POPULATIONS

SAVANNA DISTRICT

03-3527-C6-SVD

SPECIES NAME	JUL 74	AUG 74	SEP 74	OCT 74	NOV 74	DEC 74	JAN 75	FEB 75	MAR 75	APR 75	MAY 75	JUN 75
SPECIAL RECOGNITION												
BIRDS												
AMERICAN COOT	650	650	3820	30205	2060	10	0	0	2560	10580	3600	800
WATERFOWL MAINTENANCE												
SWANS												
WHISTLING SWAN	0	0	0	3	34	2	0	0	4	44	0	0
GEESE												
SNOW GOOSE	0	0	45	570	210	10	0	0	30	30	0	0
WHITE-FRONTED GOOSE	0	0	0	0	0	0	0	0	10	0	0	0
CANADA GOOSE	135	160	420	650	720	610	30	60	1920	1160	45	45
DUCKS												
COMMON MERGANSER	0	0	0	20	155	670	450	490	1535	1280	0	0
RED-BREASTED MERGANSER	0	0	0	50	220	240	0	0	105	365	0	0
HOODED MERGANSER	360	400	420	280	35	15	0	0	465	410	260	260
MALLARD	1550	3800	5800	32940	21515	16240	1800	700	23635	18145	1240	850
BLACK DUCK	0	200	470	1080	830	415	0	0	945	870	10	0
GADWALL	0	20	130	820	0	0	0	0	260	4755	420	0
AMERICAN WIGEON	0	20	310	7800	100	0	0	0	2345	11925	580	0
GREEN-WINGED (CINN.) TEAL	100	290	1310	8510	1485	35	0	0	590	1935	10	0
BLUE-WINGED TEAL	550	1450	2450	890	0	0	0	0	490	4100	880	300
NORTHERN SHOVELER	0	0	75	290	0	0	0	0	2045	2825	30	0
PINTAIL	0	120	490	5800	50	0	0	0	3775	4190	0	0
WOOD DUCK	2400	2900	7200	5800	70	0	0	10	1320	1560	1200	1200
REDHEAD	0	0	0	240	1120	160	0	10	1220	1715	30	0
CANVASBACK	0	0	0	610	6085	430	0	10	5020	5645	0	0
LESSER SCAUP	0	0	0	23410	47300	3210	0	20	68765	61430	3240	0
RING-NECKED DUCK	0	0	0	270	20	0	0	0	1830	6265	60	0
COMMON GOLDENEYE	0	0	0	40	70	330	340	470	925	1340	0	0
BUFFLEHEAD	0	0	0	40	690	15	0	0	635	420	0	0
RUDDY DUCK	0	0	0	1160	3050	110	0	0	515	4885	0	0
TOTAL SWANS	0	0	0	3	34	2	0	0	4	44	0	0
TOTAL GEESE	135	160	465	1220	930	620	30	60	1960	1190	45	45
TOTAL DUCKS	4960	9200	18655	90050	82845	21870	2590	1710	116510	134060	7960	2610
TOTAL WATERFOWL	5095	9360	19120	91273	83809	22492	2620	1770	118474	135294	8005	2655

NUMBER OF PUBLIC AFFAIRS ACTIVITIES

SAVANNA DISTRICT

03-3527-C6-SVD

PUBLIC AFFAIR ACTIVITY NAME	JUL-74	AUG-74	SEP-74	OCT-74	NOV-74	DEC-74	JAN-75	FEB-75	MAR-75	APR-75	MAY-75	JUN-75	12 MONTH TOTAL
PUBLIC AFFAIRS													
RADIO PROGRAMS	2	1	0	2	1	1	2	1	1	1	2	1	15
NEWSPAPER ARTICLES	0	0	0	1	0	0	0	0	0	0	0	0	1
TOTAL	2	1	0	3	1	1	2	1	1	1	2	1	16

NATIONAL WILDLIFE REFUGE SYSTEM

AVERAGE MONTHLY WATERFOWL POPULATIONS.

SAVANNAH DISTRICT

13-[illegible]-SVD

SPECIES NAME	JUL 74	AUG 74	SEP 74	OCT 74	NOV 74	DEC 74	JAN 75	FEB 75	MAR 75	APR 75	MAY 75	JUN 75
SPECIAL RECOGNITION BIRDS												
AMERICAN COOT	620	650	1780	24208	716	5	0	0	678	7832	1600	800
WATERFOWL MAINTENANCE												
SWANS												
WHISTLING SWAN	0	0	0	1	14	1	0	0	1	10	0	0
GEESE												
SNOW GOOSE	0	0	21	361	104	3	0	0	8	6	0	0
WHITE-FRONTED GOOSE	0	0	0	0	0	0	0	0	3	0	0	0
CANADA GOOSE	131	154	283	520	413	306	12	50	660	389	45	45
DUCKS												
COMMON MERGANSER	0	0	0	4	90	391	390	460	875	416	0	0
RED-BREASTED MERGANSER	0	0	0	16	93	109	0	0	79	133	0	0
HOODED MERGANSER	340	380	415	94	23	4	0	0	136	298	260	260
MALLARD	1460	2513	4700	21062	20264	10540	840	625	6709	7867	1000	850
BLACK DUCK	0	113	340	332	718	246	0	0	239	353	5	0
GADWALL	0	5	93	446	0	0	0	0	68	2011	135	0
AMERICAN WIGEON	0	5	195	4038	33	0	0	0	669	5532	178	0
GREEN-WINGED (CINN.) TEAL	95	183	773	3738	680	9	0	0	213	808	3	0
BLUE-WINGED TEAL	540	900	1943	337	0	0	0	0	125	2337	488	300
NORTHERN SHOVELER	0	0	51	154	0	0	0	0	529	1605	15	0
PINTAIL	0	60	330	2420	20	0	0	0	1074	1462	0	0
WOOD DUCK	2280	2725	5475	3616	18	0	0	3	540	1396	1200	1200
REDHEAD	0	0	0	116	606	48	0	3	473	941	8	0
CANVASBACK	0	0	0	169	3353	143	0	3	2731	1995	0	0
LESSER SCAUP	0	0	0	9850	10289	1075	0	5	19974	34174	968	0
RING-NECKED DUCK	0	0	0	109	10	0	0	0	501	3081	15	0
COMMON GOLDENEYE	0	0	0	8	49	203	320	390	674	362	0	0
BUFFLEHEAD	0	0	0	8	293	8	0	0	198	218	0	0
RUDDY DUCK	0	0	0	258	1259	28	0	0	144	1824	0	0
TOTAL SWANS	0	0	0	1	14	1	0	0	1	10	0	0
TOTAL GEESE	131	154	304	890	517	309	12	50	671	394	45	45
TOTAL DUCKS	4715	6884	14315	47325	47298	12803	1550	1489	35951	66723	4275	2610
TOTAL WATERFOWL	4846	7038	14619	43216	47829	13113	1562	1539	36623	67127	4320	2655

NATIONAL WILDLIFE REFUGE SYSTEM

REPORT OF ECONOMIC OUTPUTS - FY 75

(IN DOLLARS)

SAVANNA DISTRICT

03-3527-Co-SVD

TYPE OF BENEFIT	JUL-SEP 74	OCT-DEC 74	JAN-MAR 75	APR-JUN 75	FY TOTAL
REFUGE RECEIPTS					
FOR BEARERS	0.00	884.50	0.00	0.00	884.50
OTHER RECEIPTS	5.00	300.00	0.00	272.10	577.10
BY COOPRTR, FOR SELF	0.00	0.00	0.00	0.00	0.00
BY COOPRTR, FOR BSFW	0.00	0.00	0.00	0.00	0.00
TOTAL	5.00	1,184.50	0.00	272.10	1,461.60

NATIONAL WILDLIFE REFUGE SYSTEM
REPORT OF MISCELLANEOUS OUTPUTS
FY-75

SAVANNA DISTRICT
03-3527-06-SVD

TYPE OF OUTPUTS	UNITS	FY TOTAL
PROFESSIONAL SERVICES		
ECOLOGICAL MONITORING BY REFUGE PERSONNEL	PROGRAM	11
BANDING BY REFUGE PERSONNEL	PROGRAM	1
OTHER COOPERATIVE PROGM	PROGRAM	3
ENVIRONMENTAL PRESERVATION		
OTHER SCIENTIFIC	AREA	1
MISCELLANEOUS WILDLIFE OUTPUTS		
WILDLIFE DIVERSITY	NO. SPECS	45E
SPECIES DONATED	EA. ANIMAL	3

NATIONAL WILDLIFE REFUGE SYSTEM
WILDLIFE USE REPORT
WILDLIFE USE REPORT - WATERFOWL
(USE DAYS, HARVEST, & PRODUCTION)
FY-75

...M DISTRICT
...7-65-SVD

SPECIES NAME	LINE CODE	JUL-SEP 74	OCT-DEC 74	JAN-MAR 75	APR-JUN 75	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
...ERFOWL PRODUCTION										
...-DUTPUT SPECIES										
...ERICAN COOT	080 2210	0	0	0	0	0	600	0	0	
...CIAL RECOGNITION										
...DS										
...MERICAN COOT	711 2210	91500	747870	20340	306960	1166670	0	412	30205	10/15
...ERAL MAINTENANCE										
...DS										
...WHISTLING SWAN	731 1300	0	480	30	300	810	0	0	44	04/05
...SE										
...SNOW GOOSE	732 1690	630	14040	240	180	15090	0	25	570	10/05
...WHITE-FRONTED GOOSE	732 1710	0	0	90	0	90	0	0	10	03/29
...CANADA GOOSE	732 1720	17040	37440	21660	14340	90480	0	70	1920	03/15
...DS										
...R. MERGANSER	733 1290	0	14550	51750	12480	78780	0	0	1535	03/05
...RED-BREASTED MERGANSER	733 1300	0	6510	2370	3990	12870	0	0	365	04/05
...HOODED MERGANSER	733 1310	34050	3630	4080	24540	66300	0	0	465	03/15
...MALLARD	733 1320	260190	1555980	245220	291510	2352900	0	4214	32940	10/15
...BLACK DUCK	733 1330	13590	53880	7170	10740	85380	0	198	1080	10/10
...GADWALL	733 1350	2940	13380	2040	64380	82740	0	138	4755	04/10
...EUROPEAN WIGEON	733 1370	6000	122130	20070	171300	319500	0	276	11925	04/10
...BLUE-WINGED (COMM.) TEAL	733 1390	31530	122810	6390	24330	195060	0	1398	8510	10/10
...GREEN-WINGED TEAL	733 1400	101490	11610	3750	93750	210600	0	2053	4100	04/15
...NORTHERN SHOVELER	733 1420	1530	4620	15870	48600	70620	0	0	2825	04/10
...PINTAIL	733 1430	11700	73200	32220	43860	160980	0	158	5800	10/05
...RING-NECKED DUCK	733 1440	314400	109020	16290	111180	550890	0	2794	7200	09/15
...CANVASBACK	733 1460	0	23100	14280	28470	65850	0	0	1715	04/10
...LESSER SCAUP	733 1470	0	124950	82020	59850	266820	0	0	6035	11/05
...COMMON EIDER	733 1490	0	906420	599370	1054260	2560050	0	96	68755	03/10
...HARLEQUIN DUCK	733 1500	0	3570	15030	92880	111480	0	138	6265	04/10
...COMMON GOLDENEYE	733 1510	0	7800	41520	10860	60180	0	0	1340	04/05
...BUFFLEHEAD	733 1530	0	9270	5940	6540	21750	0	60	690	11/05
...RUDDY DUCK	733 1670	0	46350	4320	54720	105390	0	60	4335	04/15

NATIONAL WILDLIFE R[illegible]GE SYSTEM
WILDLIFE USE [illegible]ORT
WILDLIFE USE REPORT - WATERFOWL
(USE DAYS, HARVEST, & PRODUCTION)
FY-75

[illegible] DISTRICT
[illegible]-SVO

SPECIES NAME	LINE CODE	*****USE DAYS***** JUL-SEP 74	OCT-DEC 74	JAN-MAR 75	APR-JUN 75	FY TOTAL	FY-NO. PRODUCED	FY-NO. HARVESTED	FY-PEAK POPULATION	DATE
[illegible]FOWL PRODUCTION										
[illegible]SE										
[illegible]ANADA GOOSE	802 1720	0	0	0	0	0	50	0	0	
[illegible]KS										
[illegible]OODED MERGANSER	803 1310	0	0	0	0	0	200	0	0	
[illegible]ALLARD	803 1320	0	0	0	0	0	940	0	0	
[illegible]LUE-WINGED TEAL	803 1400	0	0	0	0	0	300	0	0	
[illegible]OOD DUCK	803 1440	0	0	0	0	0	1500	0	0	
	TOTAL	836590	4022610	1212060	2530020	8651280	3590	12130		